
May 18, 2006



Acquisition

Allegation Concerning the Mobile
Detection Assessment Response
System Program (D-2006-090)

Department of Defense
Office of Inspector General

Quality

Integrity

Accountability

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE 18 MAY 2006		2. REPORT TYPE		3. DATES COVERED 00-00-2006 to 00-00-2006	
4. TITLE AND SUBTITLE Acquisition: Allegation Concerning the Mobile Detection Assessment Response System Program				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) ODIG-AUD (ATTN: AFTS Audit Suggestions),Inspector General of the Department of Defense,400 Army Navy Drive (Room 801),Arlington,VA,22202-4704				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 36	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

Additional Copies

To obtain additional copies of this report, visit the Web site of the Department of Defense Inspector General at <http://www.dodig.mil/audit/reports> or contact the Secondary Reports Distribution Unit, Audit Followup and Technical Support at (703) 604-8937 (DSN 664-8937) or fax (703) 604-8932.

Suggestions for Future Audits

To suggest ideas for or to request future audits, contact Audit Followup and Technical Support at (703) 604-8940 (DSN 664-8940) or fax (703) 604-8932. Ideas and requests can also be mailed to:

ODIG-AUD (ATTN: AFTS Audit Suggestions)
Department of Defense Inspector General
400 Army Navy Drive (Room 801)
Arlington, VA 22202-4704

DEPARTMENT OF DEFENSE

hotline

To report fraud, waste, mismanagement, and abuse of authority.

Send written complaints to: Defense Hotline, The Pentagon, Washington, DC 20301-1900
Phone: 800.424.9098 e-mail: hotline@dodig.osd.mil www.dodig.mil/hotline

Acronyms

EMD
MDARS
SSC-SD

Engineering and Manufacturing Development
Mobile Detection Assessment Response System
Space and Naval Warfare Systems Center, San Diego



INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
400 ARMY NAVY DRIVE
ARLINGTON, VIRGINIA 22202-4704

May 18, 2006

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR ACQUISITION,
TECHNOLOGY, AND LOGISTICS
AUDITOR GENERAL, DEPARTMENT OF THE ARMY
AUDITOR GENERAL, DEPARTMENT OF THE NAVY

SUBJECT: Report on the Allegation Concerning the Mobile Detection Assessment
Response System Program (Report No. D-2006-090)

We are providing this report for your review and comment. We performed the audit in response to a congressional request on behalf of a constituent who alleged waste in the Mobile Detection Assessment Response System Program. We considered management comments on a draft of this report when preparing the final report.

DoD Directive 7650.3 requires that all recommendations be resolved promptly. The Joint Program Executive Officer for Chemical and Biological Defense comments were partially responsive; therefore, we added a recommendation to the Army Acquisition Executive. We request that the Army Acquisition Executive and the Joint Program Executive for Chemical and Biological Defense provide comments on the recommendations by June 19, 2006.

If possible, please send management comments in electronic format (Adobe Acrobat file only) to AUDACM@DODIG.MIL. Copies of the comments must contain the actual signature of the authorizing official. We cannot accept the /Signed / symbol in place of the actual signature. If you arrange to send classified comments electronically, they must be sent over the SECRET Internet Protocol Router Network (SIPRNET).

We appreciate the courtesies extended to the staff. Questions should be directed to Mr. Bruce A. Burton at (703) 604-9071 (DSN 664-9071) or Ms. Dianna J. Pearson at (703) 604-9063 (DSN 664-9063). See Appendix F for the report distribution. Audit team members are listed inside the back cover.

By direction of the Deputy Inspector General for Auditing:

Richard B. Jolliffe
Assistant Inspector General
Acquisition and Contract Management

Department of Defense Office of Inspector General

Report No. D-2006-090

May 18, 2006

(Project No. D2005-D000AB-0191.000)

Allegation Concerning the Mobile Detection Assessment Response System Program

Executive Summary

Who Should Read This Report and Why? DoD personnel who are responsible for programs associated with the DoD Joint Robotics Program should read this report. The report addresses an allegation of waste in the Mobile Detection Assessment Response System Program.

Background. We performed the audit in response to a congressional request on behalf of a constituent who alleged waste in the Mobile Detection Assessment Response System Program. The constituent identified 27 issues of concern with the program. The Mobile Detection Assessment Response System Program is a joint Army and Navy program to develop a robotic physical security system and is part of the Joint Robotics Program. The program is managed by the Army under the Product Manager, Force Protection Systems, which is an organization under the Joint Program Executive Office for Chemical and Biological Defense. Budget documentation from February 2000 showed an engineering and manufacturing development budget amount of more than \$19 million for the program for FY 1999 through FY 2003. The Joint Robotic Program budget for the same period was \$67.6 million. The system has an interior platform and an exterior platform and both platforms are controlled from a single console, using the Multiple Resource Host Architecture command and control software. The interior program, which was initiated in 1988, was to improve physical security, increase the accuracy and efficiency of processes, reduce loss of materiel, lower risk to personnel, and decrease the manpower-intensive requirement associated with securing and accounting for costly and critical assets. The interior program used technology developed by Cybermotion, Inc., of Roanoke, Virginia, and product inventory subsystems developed by General Dynamics Robotics Systems. The Army Program Office placed the interior program in an unofficial suspension in July 2003 because difficulty in obtaining supplies and limitations in commercial technological advances prevented the program from being cost-effective for users. The exterior program, which was initiated in 1993, extended the robotic security and inventory control concepts of the interior program to an outdoor environment. As of February 2006, the exterior program was still in development.

Results. The allegation of waste was partially substantiated. In assessing the 27 issues of concern that were submitted with the allegation, we did identify outstanding problems with program management that the Army Program Office has not resolved for the Mobile Detection Assessment Response System-Interior Program. As a result, we have no assurance that the Mobile Detection Assessment Response System-Exterior Program will not encounter the same problems. See the Finding section of the report for the detailed recommendations.

Management Comments and Audit Response. The Army nonconcurred with the report conclusions and recommendations. Management stated that the report failed to define the allegations that were substantiated and why. While the report did identify shortfalls in the program management, the report failed to tie program management shortfalls to allegations of waste. A discussion of the management comments is in the Finding section of the report and the complete text is in the Management Comments section.

Although the Army nonconcurred with the recommendations, the Army comments partially meet the intent of the recommendations. The Army scheduled a program review for the Mobile Detection Assessment Response System Program and decided to formally terminate the interior program. The Army also briefed the Milestone Decision Authority but did not state why the Milestone Decision Authority allowed the Mobile Detection Assessment Response System-Interior Program failures to continue without intervening and allowed the program to remain in limbo for nearly 3 years. Because of the demise of the Mobile Detection Assessment Response System-Interior Program, the Army Acquisition Executive and the Milestone Decision Authority need to oversee the Mobile Detection Assessment Response System-Exterior Program until the Army Program Office demonstrates that it can successfully execute the program and provide the timely and accurate data needed to make management decisions. As a result of the Army comments, we added a recommendation to the Army Acquisition Executive. We request that the Army Acquisition Executive and the Joint Program Executive Officer for Chemical and Biological Defense provide comments on the final report by June 19, 2006.

Table of Contents

Executive Summary	i
Background	1
Objective	3
Finding	
Management of the Mobile Detection Assessment Response System Program	4
Appendixes	
A. Scope and Methodology	12
Scope Limitation	12
Prior Coverage	12
B. Congressional Request for Review of the Mobile Detection Assessment Response System	13
C. Audit Response to the Allegation	14
D. Contract Amendments	22
E. Test Results	23
F. Report Distribution	24
Management Comments	
Department of the Army	27

Background

We performed the audit in response to a request by The Honorable Bob Goodlatte, Congress of the United States, House of Representatives, Virginia, on behalf of a constituent, who alleged fraud in the Mobile Detection Assessment Response System (MDARS) Program. Appendix B shows the congressional request for the audit. The Congressman stated that the constituent alleged fraud, but, based on audit field work, we determined the allegation to be waste rather than fraud. See Appendix C for the audit response to the allegation. In some cases, we made minor editorial changes to the issues to clarify the meaning.

MDARS Program. The MDARS Program is a joint Army and Navy program to field interior and exterior autonomous platforms to assess security and inventory at DoD warehouses and storage sites and is part of the Joint Robotics Program. The Army manages the program through the Product Manager, Force Protection Systems (Army Program Office). Budget documentation from February 2000 showed an engineering and manufacturing development (EMD) budget amount of more than \$19 million for the program for FY 1999 through FY 2003. The goal of MDARS is to provide mobile robotic systems to patrol warehouses and storage sites, to detect and report abnormalities, such as fires or floods, detect intruders, and to determine the inventory through specialized radio frequency transponder tags. Robotic platforms for MDARS-Interior and MDARS-Exterior use the Multiple Resource Host Architecture software for command and control.

MDARS-Interior Program. The MDARS-Interior Program was initiated to improve the effectiveness of a shrinking security guard force and to reduce intensive manpower requirements associated with accounting for high dollar assets. Based on a Cybermotion, Inc. (Cybermotion), K2A Navmaster platform, the MDARS-Interior platform incorporated additional collision avoidance, intruder detection, and inventory assessment. In March 1992, Space and Naval Warfare Systems Center, San Diego (SSC-SD), formerly the Naval Command, Control and Ocean Surveillance Center, entered into a Cooperative Research and Development Agreement with Cybermotion to improve the navigation, detection, assessment, and response of the Cybermotion platform. In September 1994, the Cybermotion portion of the Cooperative Research and Development Agreement transitioned into a Broad Agency Announcement that required Cybermotion to improve intruder detection and to integrate automated inventory assessment. In April 1999, the Army Program Office awarded a contract to General Dynamics Robotic Systems (General Dynamics), formerly Robotic Systems Technology, for the EMD of a mobile robot platform that could perform security functions inside warehouses and similar facilities. The General Dynamics proposal included the Cybermotion K2A platform that SSC-SD had used and tested. When Cybermotion replaced the K2A platform with the newer K3A platform, General Dynamics amended its contract to delete the K2A platform and replace it with the newer platform. In 2003, Cybermotion discontinued operations and the Army Program Office placed the MDARS-Interior Program in an unofficial suspension. Reasons cited for the suspension included difficulty in obtaining supplies for the program and commercial technological developments that prevented MDARS-Interior from being cost-effective.

MDAR-Exterior Program. The Army and Navy initiated the MDARS-Exterior Program to extend the robotic security and inventory control of the interior program to exterior environments, such as storage yards, dock facilities, and airfields. Robotic inventory control verifies the contents of closed structures, such as warehouses and bunkers, without opening the structures, and verifies the contents of items stored outside the structures. In 1993, the Army Program Office awarded General Dynamics a Broad Agency Announcement to develop outdoor mobility platforms that could navigate autonomously. In 1996, General Dynamics demonstrated the operation of the autonomous navigation of the platform and, in 1997, demonstrated collision avoidance. As of February 2006, the MDARS-Exterior Program was still in development.

Multiple Resource Host Architecture. The Multiple Resource Host Architecture, which is command and control software that SSC-SD developed, coordinates control of multiple autonomous interior and exterior systems. If a system encounters an event for which it is programmed to respond, the software can respond from several systems simultaneously. The software can also integrate remote sensors, such as radio frequency identification tags. The software was designed to run automatically with minimal user oversight and can be configured based on the physical requirements of individual sites. The tactical spin-off of the software, Multi-Robot Operator Control Unit, was designed to run in a backpack or portable configuration for use with the exterior systems

Joint Robotics Program. In 1989, Congress was concerned that the many disparate DoD robotic programs were insufficiently coordinated. To produce a more focused and cost-effective robotics program, Congress deleted funds for separate projects and consolidated them under the Office of the Secretary of Defense policy and program direction. Consequently, Congress established the Joint Robotics Program to consolidate all of the robotics programs, provide uniform direction, prevent duplication, and share technology among the Services. The Under Secretary of Defense for Acquisition, Technology, and Logistics designated the Deputy Director, Land Warfare and Munitions to lead the congressionally directed consolidation. Although the MDARS Program initially consisted of the MDARS-Interior and MDARS-Exterior programs, the exterior program was more applicable to robotic systems within the Joint Robotics Program. The Joint Robotics Program Office provided the Army funding for MDARS and mandated the use of Joint Architecture for Unmanned Systems, which requires a common interoperable architecture for the DoD unmanned robotics programs.

Product Manager, Force Protection Systems. The Product Manager, Force Protection Systems, located at Fort Belvoir, Virginia, is an organization under the Joint Program Executive Office for Chemical and Biological Defense, which provides force protection and physical security products and applications. The Army Program Office also provides centralized management for research, development, and acquisition of interior physical security equipment, command and control systems, security lighting, tactical security systems, barrier systems, mass notification and personnel alert systems, and interior and exterior robotics. The Army Program Office is also responsible for validating commercial-off-the-shelf products that can enhance security for Service members and organizations.

Space and Naval Warfare Systems Center, San Diego. The Navy provides technical direction and systems integration for the MDARS Program through the SSC-SD. The SSC-SD is a research, development, test and evaluation, engineering, and fleet support center for command, control, and communication systems and ocean surveillance. The SSC-SD provides information resources to support the joint warfighter in mission execution and force protection. The Unmanned Systems Branch of SSC-SD has been involved in robotics research, development, and test and evaluation since the early 1960s. With approximately 20 active projects, the Unmanned Systems Branch is a center for development of land, air, and water surface platforms.

Objective

The audit was requested by The Honorable Bob Goodlatte, House of Representatives, Virginia, on the behalf of a constituent who alleged waste in the MDARS Program and identified 27 issues of concern. The audit objective was to determine whether the allegation and 27 issues have merit. We did not fully review the Managers' Internal Control Program because the audit scope was limited to reviewing the congressional request on the allegation of waste.

Management of the Mobile Detection Assessment Response System Program

We partially substantiated the allegation based on waste in the MDARS Program. Specifically, the Army Program Office had not resolved outstanding problems with program management, including contract award and administration and contractor performance and oversight, which contributed to the suspension of the MDARS-Interior Program. In addition, the Army Program Office had not provided program cost data or assessed the program management problems to identify lessons learned from the MDARS-Interior Program that could benefit the MDARS-Exterior Program. These conditions occurred because the Army Program Office had not taken decisive action in managing the MDARS-Interior Program. As a result, the MDARS-Interior Program remains in limbo while the Army Program Office proceeds with the MDARS-Exterior Program and the Army has no assurance that the Army Program Office will not encounter the same problems for the MDARS-Exterior Program.

Program Management

We partially substantiated the allegation based on waste in the MDARS-Interior Program. Although we found no evidence that the Army Program Office deliberately took action to cause the MDARS Program to fail, we identified outstanding problems with program management that the Army Program Office had not resolved and that could cause the MDARS-Exterior Program to fail. Program management problems began when the Army Program Office awarded the EMD contract without resolving concerns about the participation of the platform supplier. In addition, the Army Program Office did not adequately monitor contractor performance or total program costs for the MDARS Program. Finally, the Army Program Office had not conducted any assessments on the MDARS-Interior Program to determine how it could apply lessons learned for the MDARS-Exterior Program. Our discussion on each of the problems follows.

Contract Award and Administration. The Army Program Office awarded the EMD contract without resolving concerns about the participation of the platform supplier. Because the platform was critical to the success of the MDARS-Interior Program and the platform supplier was financially unstable, the Army Program Office should have required General Dynamics to develop a plan for program continuity and approved the plan before awarding the contract. The award and subsequent limited performance by the supplier contributed to milestone delays and cost increases. Based on contract documentation, the Army Program Office awarded the EMD contract for the MDARS-Interior Program to General Dynamics on April 30, 1999, for about \$1.7 million. The contract files did not document the initial period of performance for the EMD contract however, the Army Program Office issued nine contract amendments to the EMD contract. One amendment increased the contract amount by about \$0.9 million without extending milestones. Three other amendments extended milestones. Of the three amendments for extensions, two provided testing as the reason for the

contract extension and increased the contract amount by an additional \$1.4 million. The third amendment did not state the reason for further extending the period of performance. Appendix D shows the nine contract amendments, the cost of each amendment, and the change the amendment made to the period of performance. Based on the last amendment that extended the period of performance to February 28, 2003, the total contract period of performance for the EMD contract was nearly 4 years. Based on the contract initial award of \$1.7 million and the cost increases of about \$2.3 million, the EMD contract amount has increased to \$4 million. The Army Program Office did not take decisive action to mitigate problems and allowed General Dynamics to operate with minimal oversight as the program continued to struggle.

Contractor Performance and Oversight. To assess the allegation of waste of taxpayer dollars for the MDARS Program because of milestone slippages, contract extensions, and cost overruns, we requested documentation supporting milestone extensions and contract cost increases to identify oversight provided by the Army Program Office for the MDARS Program. The Army Program Office provided test reports that showed that milestones were extended for testing, but the test reports did not identify reasons for the test failures or determine fault for the failures, except for the testing failures related to the General Dynamics supplier for the platform. According to the test reports, General Dynamics conducted most of the tests on the platform (see Appendix E). Because the Army Program Office contract was with General Dynamics rather than the platform supplier, the Army Program Office should have required General Dynamics to share accountability for the testing failures. We could find no evidence that the Army Program Office increased oversight as the contract was extended and costs increased. Instead, the Army Program Office allowed General Dynamics to attribute testing failures to its own supplier without retribution. The Army Program Office should have provided an independent tester to assess testing results that General Dynamics reported to determine accountability for the testing failures and try to get the program back on track. Appendix E shows a list of the tests and testers for MDARS-Interior. Although the Army Program Office unofficially suspended the MDARS-Interior Program in 2003, it did not take action to either terminate the program or develop a strategy to revive it.

Program Costs. To further assess the allegation of waste for MDARS, we requested documentation on total program costs for MDARS-Interior and MDARS-Exterior to determine the extent of spending for the program. The Army Program Office was unable to provide complete documentation as of February 2006, but budget records show that the Army requested \$6.1 million for the EMD contract for the MDARS-Interior Program as of FY 2000. Although we found amounts for the EMD contract, the costs do not represent the total amount the Army Program Office paid for the MDARS-Interior Program. In addition to the almost \$4 million that the Army Program Office paid General Dynamics for the EMD contract between FY 1999 and FY 2003, the Army Program Office used Computer Sciences Corporation for support services for the MDARS Program. According to financial records for Computer Sciences Corporation, the Army Program Office paid Computer Sciences Corporation about \$17.8 million between March 1999 and August 2005. We could not determine how much of the \$17.8 million that the Army Program Office paid Computer Sciences Corporation for services related to the MDARS Program. Also, we did not find financial data for the command and control software that SSC-SD developed, various

subsystems attached to the platform that provided the inventory and security assessment, and the testing support that Cybermotion provided for the MDARS Program. Although the Army Program Office was not able to provide program cost data for the MDARS-Exterior Program as of February 2006, budget records show that the Army requested \$14.4 million for the EMD phase for FY 2004 through FY 2006. Because the Army was not able to provide us with a full assessment of program costs, we were unable to address the issue that the constituent raised concerning cost overruns for the MDARS Program.

Assessment of MDARS-Interior for Lessons Learned. The Army Program Office had not conducted any assessments of the problems that prevented the successful execution of the MDARS-Interior Program but is still proceeding with the MDARS-Exterior Program without determining how to prevent a recurrence of the MDARS-Interior problems for the MDARS-Exterior Program. Therefore, the Army cannot be assured that the problems will not recur. Specifically, the Army Program Office awarded the EMD contract without agreeing to a contingency plan for program continuity if the supplier could not deliver the platforms. Also, the Army Program Office did not provide documentation showing that it independently assessed the testing issues that General Dynamics reported to determine accountability and appropriate action for those issues. Further, the Army Program Office had not taken decisive action on the status of the MDARS-Interior Program and the program has been in limbo since 2003. The Army Program Office needs to decide whether the program should be terminated or can be revived. Until the Army Program Office resolves the problems with the program management of the MDARS-Interior Program, the Army Program Office may continue to manage the MDARS-Exterior Program in the same manner as the MDARS-Interior Program and repeat program management mistakes.

Conclusion

We partially substantiated the allegation based on waste but there was no evidence to suggest that the Army Program Office deliberately caused the program to fail. We identified outstanding problems with program management that the Army Program Office needs to resolve for the EMD contract award and administration, and subsequent program performance. In addition, the Army Program Office had not applied lessons learned from the MDARS-Interior Program for the MDARS-Exterior Program. Until the Army Program Office adequately resolves those program management issues, the success of the MDARS-Exterior Program remains questionable.

Management Comments on the Findings and Conclusion and Audit Response

Army Comments on Lessons Learned. The Joint Program Executive Officer for Chemical and Biological Defense stated that the conclusion that MDARS-Exterior is at risk of the same failure is unwarranted because the Army Program Office has used lessons learned from the MDARS-Interior Program and incorporated them, as appropriate, in the MDARS-Exterior Program. Lessons learned include additional field testing; use of the revised Earned Value Management System to better track cost and performance; implementation of a revised Risk Detection/Assessment Program; use of independent Government Test and Evaluation Agencies during production qualification tests; and the use of a tiger team of robotic specialists to augment the working groups.

Audit Response. During the audit, we requested that the Army Program Office provide documentation on assessments conducted for the MDARS-Interior Program that were used to improve management of the MDARS-Exterior Program, but the manager stated that the program office had not conducted any assessments. Therefore, we commend the Army Program Office for taking action after our request to implement mechanisms, such as tracking cost and performance and assessing risk, to prevent a recurrence of failures for the MDARS-Exterior Program. The action should help the Army Program Office to minimize mistakes made for the MDARS-Interior Program in oversight of contract award and administration, contractor performance, and contract program costs.

Army Comments on the Platform Supplier. The Army stated that all concerns related to the participation and financial stability of the platform supplier were satisfactorily resolved by the contracting agency, the Source Selection Evaluation Board, and the Source Selection Authority at the time of the award. The supplier was providing a commercially available technology already in use by private industry.

Audit Response. We disagree that concerns related to the participation and financial stability of the supplier were adequately resolved because the MDARS-Interior Program ended when the supplier discontinued operations. Since the Army states that the supplier was supplying a commercially available technology in use in private industry, the Army Program Office should have been able to continue the MDARS-Interior Program simply by using a different supplier. Because the platform supplier, Cybermotion, indicated an intent not to work with General Dynamics, the Army organizations involved in the contract award should have required the contractor to propose other suppliers for the technology and to develop a plan to continue the program if the supplier in the bid could or would not perform. Further, the Army and the contractor should have agreed on a course of action for program continuity before the contract award. Instead, the Army awarded the contract without adequate contingency planning, in spite of the financial problems of the supplier, and, as a result, the MDARS-Interior Program ended when the supplier discontinued operations.

Army Comments on Contractor Oversight for Testing. The Army stated that the auditors' validation of waste because of schedule adjustments was based on test failures that were unsupervised and that the report erroneously identified General

Dynamics as the tester for the Limited User Test instead of the provider of logistics support only. The comments also state that the Army Operational Test Command prepared, coordinated, and executed the Limited User Test. All other testing was reviewed and approved by the Government prior to execution.

Audit Response. The report does not state that the Army Program Office was not present during testing; it states that the Army Program Office allowed the contractor to test the supplier it selected and to request milestone extensions and contract increases for testing failures. The report also states that the Army allowed General Dynamics to attribute testing failures to the supplier without sharing accountability in the failures. We revised Appendix E to show that the tester for the Limited User Test was the Army Operational Test Command, but the change does not affect the milestone extensions and contract increases that the Army provided General Dynamics for testing.

Army Comments on Program Costs. The Army stated that the costs cited in the report need to be revised to show that the Army did not request an additional \$6.1 million in FY 2000 to support the MDARS-Interior Program. The Army requested only \$2 million in additional research, development, test, and evaluation funding. Also, Computer Science Corporation provides Scientific, Engineering, and Technical Assistance for the Army Program Office and its products and received only \$1.6 million for its assistance on the MDARS-Interior Program.

Audit Response. During the Audit, we requested documentation on program costs for the MDARS-Interior and Exterior programs, but the Army Program Office was unable to provide the documentation. Therefore, we queried DoD financial databases that included budget records, the DD 350 contract action database, and the Mechanization of Contract Administration Services system for financial documentation on the MDARS-Interior Program. Based on those financial records, we identified incomplete financial data for the MDARS-Interior Program that included \$4 million for the EMD contract and \$17.8 million for Computer Science Corporation. We did not find documentation on other systems that were added to the platform, such as the command and control software, various subsystems that were attached to the platform to provide inventory and security assessment, or testing support that Cybermotion and other testing organizations provided. Although the MDARS-Interior Program has been inactive since 2003, the Army did not comment on the actual costs for the program. Further, financial records show that, as of February 2006, the Army requested \$14.4 million for the EMD phase for the MDARS-Exterior Program, but Army did not comment on the actual costs for that program either.

Army Comments on the Conclusion. The Army nonconcurred with the conclusion, stating that the report failed to clearly define the allegations that were substantiated and the reasons that they were substantiated. Army stated that, to substantiate waste, the report must identify specific instances where the Army Program Office committed funds knowing that the activity would fail or would serve no useful purpose. The Army acknowledged that the report identified shortfalls in program management but stated that the report did not appropriately tie the shortfalls to allegations of waste.

Audit Response. The constituent initially alleged fraud because he believed that the Army Program Office wasted Government funds on a program that was designed to fail. Because we concluded that the Army seemed genuinely committed to the

successful execution of the program, we did not substantiate the allegation of fraud or that the Army Program Office took deliberate action to cause the MDARS-Interior Program to fail. However, we did substantiate the allegation of waste because of program mismanagement. Therefore, the allegation was partially substantiated based on the issues that contributed to waste. Specifically, the Army Program Office did not exercise effective oversight over the contractor that was awarded the EMD contract and failed to effectively manage the contract award and administration, contractor performance, and contract program costs.

We do not believe that program mismanagement was intentional. However, it contributed to waste because Government funds were committed to a program that did not accomplish the stated objective. In this case, since the Army should have clearly known that the platform was integral to the robotic system, that the subcontractor did not want to work with the prime contractor, and that the subcontractor was financially unstable, it was wasteful not to develop a plan for continuity. The abeyance and ultimate decision to terminate the program support that conclusion.

Recommendations, Management Comments, and Audit Response

Recommendation Added. As a result of management comments, we added a recommendation to the Army Acquisition Executive.

- 1. We recommend that the Army Acquisition Executive oversee the Mobile Detection Assessment Response System-Exterior Program until the Product Manager, Force Protection Systems, demonstrates that the Army Program Office can successfully execute the program and provide timely and accurate data needed to make management decisions.**
- 2. We recommend that Product Manager, Force Protection Systems, provide a formal assessment for the Mobile Detection Assessment Response System Interior and Exterior programs to the Army Acquisition Executive and the Deputy Director, Land Warfare and Munitions, that includes:**
 - a. Planned and actual program milestones for the Interior and Exterior programs and reasons for variances.**
 - b. Planned and actual program costs for the Interior and Exterior programs and reasons for the variances.**
 - c. Actions taken by the Army Program Office for contractor performance that did not meet established performance parameters.**
 - d. Documentation showing the Army Program Office oversight of testing that supports the decision to allow General Dynamics Robotics Systems to continue all testing for the Mobile Detection Assessment Response System-Interior Program.**
 - e. A formal termination of the Mobile Detection Assessment Response System-Interior Program or a strategy to revive the program.**
 - f. An action plan for the successful execution of the Mobile Detection Assessment Response System-Exterior Program.**

Army Comments on the Recommendations. The Army nonconcurrent with the recommendations, stating that it is not appropriate to brief the Army Acquisition Executive on the MDARS-Interior Program. Instead, a program review should be provided to the Joint Program Executive Officer for Chemical and Biological Defense, who is the Milestone Decision Authority for the MDARS Program. The Joint Project Manager, Guardian scheduled the MDARS Program review with the Milestone Decision Authority for April 4, 2006, and recommended a formal termination for MDARS-Interior. Also, the Combat Developer removed its requirement for MDARS-Interior. The review with the Milestone Decision Authority also included a status on the MDARS-Exterior Program, which remains

on schedule and within established costs. The MDARS-Exterior Program is scheduled for a Milestone C, Full Rate Production, In Process Review, in the first quarter of FY 2007.

Audit Response. Although the Army nonconcurred with the recommendations, the Army comments partially meet the intent of the recommendations. The Army scheduled a program review for the MDARS Program and decided to formally terminate the interior program. The Army also briefed the Milestone Decision Authority but the Army comments did not state why the Milestone Decision Authority allowed the MDARS-Interior Program failures to continue without intervening and allowed the program to remain in limbo for nearly 3 years. Therefore, we determined that a program review should be elevated to a level that is independent of the program. Even if Army terminates the MDARS-Interior Program, it still should address the problems that caused its demise and assess risk of these problems occurring for the MDARS-Exterior Program. Further, the Army Program Office should show that the action it has taken based on lessons learned are providing positive results for the MDARS-Exterior Program.

The Army stated that the MDARS-Exterior Program remains on schedule and within established costs. However, the Army Program Office did not provide documentation on cost or schedule data during the audit. Therefore, we caution the Army on being optimistic on the documentation that the program office can provide. Although the Army stated that the Earned Value Management System tracks cost and performance data, the Army did not state which data are tracked, when it started using this system, and whether the data provided were tested and reviewed for accuracy. Because of the demise of the MDARS-Interior Program, the Army Acquisition Executive and the Milestone Decision Authority need to oversee the MDARS-Exterior Program more closely until the Army Program Office demonstrates that it can successfully execute the program and provide timely and accurate data needed to make management decisions. As a result of the comments, we added a recommendation to the Army Acquisition Executive and request that the Army Acquisition Executive and the Joint Program Executive Officer for Chemical and Biological Defense provide comments on the final report.

Appendix A. Scope and Methodology

To assess the validity of the allegation of waste in the MDARS Program, we interviewed Army, Navy, and Cybermotion officials. We also reviewed the Cooperative Research and Development Agreement and the Broad Agency Announcement between Cybermotion and SSC-SD focusing on the Cybermotion platform and the cooperative efforts between SSC-SD and Cybermotion to enhance the functionality of the platform. In addition, we reviewed MDARS contract files. Specifically, we reviewed the request for proposal, the Lockheed Martin and Cybermotion bid, the General Dynamics bid, the contract award, the contract amendments, and contract office correspondence files for the MDARS Program. We also reviewed test reports for the platform and the command and control software. We reviewed records for the period September 1991 to January 2006. We performed this audit from June 2005 through January 2006 in accordance with generally accepted government auditing standards. We initially started the audit in January 2004 but suspended it because of higher priorities pertaining to the Base Realignment and Closure validation.

Government Accountability Office High-Risk Area. The Government Accountability Office has identified several high-risk areas in DoD. This report provides coverage of the DoD Contract Management high-risk area.

Use of Computer-Processed Data. We did not use computer-processed data to perform this audit.


Use of Technical Support. The Technical Assessment Division, Office of the Assistant Inspector General for Audit Followup and Technical Support provided technical support for this audit. Specifically, the Technical Assessment Division evaluated technical documents, such as the test and evaluation master plan, the system evaluation report, the technical feasibility report, and production qualification tests, and provided technical assessments on the test results, especially for the Cybermotion platform and the software. In addition, the Technical Assessment Division reviewed the Cooperative Research and Development Agreement for the joint development effort between SSC-SD and Cybermotion and both the Cooperative Research and Development Agreement and the Broad Agency Announcement to determine technologies developed and agreements regarding technology and ownership rights.

Scope Limitation. We did not fully review the Managers' Internal Control Program because the audit scope was limited to the congressional request on the allegation of waste.

Prior Coverage

No audits have been conducted on the MDARS Program in the last five years.

Appendix B. Congressional Request for Review of the Mobile Detection Assessment Response System Program

BOB GOODLATTE 6TH DISTRICT, VIRGINIA 2240 RAYBURN HOUSE OFFICE BUILDING WASHINGTON, DC 20515-4606 (202) 225-5431 FAX (202) 225-9681 www.house.gov/goodlatte tft2bob@mail.house.gov DEPUTY MAJORITY WHIP REPUBLICAN POLICY COMMITTEE CHAIRMAN, HOUSE REPUBLICAN HIGH TECHNOLOGY WORKING GROUP CO-CHAIR, CONGRESSIONAL INTERNET CAUCUS	 Congress of the United States House of Representatives October 24, 2003	COMMITTEE ON AGRICULTURE CHAIRMAN COMMITTEE ON THE JUDICIARY VICE-CHAIRMAN, SUBCOMMITTEE ON COURTS, THE INTERNET, AND INTELLECTUAL PROPERTY SUBCOMMITTEE ON CRIME, TERRORISM, AND HOMELAND SECURITY SELECT COMMITTEE ON HOMELAND SECURITY SUBCOMMITTEE ON INFRASTRUCTURE AND BORDER SECURITY SUBCOMMITTEE ON CYBERSECURITY, SCIENCE, AND RESEARCH & DEVELOPMENT
--	--	--

The Hon. Joseph E. Schmitz
Inspector General
Department of Defense
The Pentagon
Washington, D.C. 20301

VIA FAX
(703)604-8567


Dear Mr. Schmitz:

Attached please find a letter that I have received from my constituent, [REDACTED], regarding his concerns about alleged fraud in the MDARS program.

I would appreciate you looking into this matter and providing me with a response for my constituent. Please mail your response to my Roanoke office at the address marked below.

Thank you for your assistance.

With kind regards.

Very truly yours,

Bob Goodlatte
Member of Congress

RWG:pl

Attachment

<input type="checkbox"/> 2 SOUTH MAIN STREET SUITE A, FIRST FLOOR HARRISONBURG, VA 22801-3707 (540) 432-2391 FAX (540) 432-8593	<input type="checkbox"/> 916 MAIN STREET SUITE 300 LYNCHBURG, VA 24504-1608 (434) 845-8306 FAX (434) 845-8245	<input checked="" type="checkbox"/> 10 FRANKLIN ROAD, S.E. SUITE 540 ROANOKE, VA 24011-2121 (540) 857-2672 FAX (540) 857-2675	<input type="checkbox"/> 7 COURT SQUARE STAUNTON, VA 24401-3307 (540) 885-3861 FAX (540) 885-3330
---	---	---	--

PRINTED ON RECYCLED PAPER

Appendix C. Audit Response to the Allegation

A constituent of Congressman Goodlatte alleged waste in the MDARS-Interior Program and identified 27 issues of concern with program management. We listed the allegation and each issue contained in the allegation. We provided a response based on the results of our review. In some cases, we made minor editorial changes to the issues to clarify the meaning.

Allegation. The Army has wasted taxpayer dollars on the MDARS Program, which has been designed to fail.

Audit Response. The allegation was partially substantiated. Although we identified problems with the contract award and administration, contractor performance and oversight, and program costs reported for the MDARS-Interior Program, we found no evidence that the Army Program Office deliberately took action to cause the MDARS Program to fail. The Army Program Office has not resolved the problems identified. Because of the problems, the Army Program Office recommended MDARS-Interior for abeyance in July 2003 when Cybermotion went out of business and the Army Program Office had no alternate source for the interior platform. We reviewed the suspension plan and found that the Army Program Office did not complete the processing of the plan. We address the abeyance plan in the program management section. As of February 2006, MDARS-Exterior was still in development.

To assess the validity of the issues addressed along with the allegation, we interviewed Army, Navy, and Cybermotion officials involved with the MDARS Program; reviewed extensive contract and program management documentation; and contacted users for the MDARS-Exterior Program. Our discussion on each of the issues follows.

Issue 1. Cybermotion produced the robotic systems on which the MDARS-Interior Program was based.

Audit Response. We determined that Cybermotion produced the robotic systems that were used for MDARS-Interior. The Army Program Office purchased the platforms as commercial products, and SSC-SD modified the platforms to add security assessment and inventory management capabilities based on the operational requirements of its users. Without the modifications, the platforms would not have met user requirements. On March 9, 1992, SSC-SD and Cybermotion signed a Cooperative Research and Development Agreement to jointly modify the platforms. In September 1994, the Cooperative Research and Development Agreement transitioned into a Broad Agency Announcement that added functionality for the platforms. Although Cybermotion provided the platforms for MDARS-Interior, the Army Program Office purchased the platforms as commercial products and SSC-SD worked with Cybermotion to modify the platforms to add functionality based on user requirements.

Issue 2. Although the great bulk of the research and development funding for the program over 10 years went to SSC-SD and the Army Armament Research, Development, and Engineering Center, none of the work provided by either of the groups was of any value.

Audit Response. SSC-SD personnel have worked on robotic systems since 1980, starting with the ROBART series, which includes three generations of prototypes, ROBART I, II, and III. ROBART I could detect and ROBART II could detect and assess. ROBART III includes a response capability but the development is ongoing. ROBART III continues to be used for integration of new technologies for robots. Technologies developed with the ROBART series were used in support of the MDARS Program. SSC-SD also developed the command and control software for the MDARS Program. Based on the 2005 Joint Robotics Program Master Plan, the command and control software works with legacy physical security infrastructure, including remote control of swing-arm gates, garage doors, and fence openings. Further, the software was designed to interact with other systems, such as interior platforms, interior intrusion detection sensors, and exterior vehicles. The Army Program Office tasked the Army Armament Research, Development, and Engineering Center to conduct the market investigation for the MDARS Program in 1989. Also, the Army Armament Research, Development, and Engineering Center was the MDARS system integrator and SSC-SD provided systems to the Army Armament Research, Development, and Engineering Center MDARS laboratory for system debugging and evaluation. Based on documentation provided, we believe that both SSC-SD and the Army Armament Research, Development, and Engineering Center made valuable contributions to the MDARS Program.

Issue 3. A great deal of money was also spent for Computer Sciences Corporation to administer the program and provide technical oversight.

Audit Response. Computer Sciences Corporation is a support contractor that the Army Program Office uses for support services. Computer Sciences Corporation was one of four contractors that the Army Program Office used to evaluate proposals for MDARS-Interior. Although the Army Program Office did not provide total program costs, financial records showed that the Army Program Office paid Computer Sciences Corporation about \$17.8 million between March 1999 and August 2005. We could not determine how much of the \$17.8 million was for services related to the MDARS Program. Also, SSC-SD, rather than Computer Sciences Corporation, provides technical oversight for the MDARS Program.

Issue 4. As the program evolved, Cybermotion developed many of the items required using its own research and development funding, and these developments were substituted by the program office to cover failures and to pass milestone tests that would not have passed.

Audit Response. We reviewed the test reports that the Army Program Office provided for the MDARS-Interior Program (see Appendix E). The reports did not show any evidence that problems were resolved based on Cybermotion intervention or product substitution. An SSC-SD test report showed minor problems with the platform navigation, an Army Program Office test report showed no findings with the Cybermotion platform, and the General Dynamics

tests reports showed findings with the platform docking system components associated with automatic docking and obstacle avoidance. The General Dynamics reports also stated that Cybermotion updated the platform from the K2A to the K3A and that the docking system components tested successfully prior to the change.

Issue 5. A Cybermotion official stated that Cybermotion endured the program mismanagement in silence because their goal was to get to the production and deployment phase.

Audit Response. We are not privy to company decisions that Cybermotion made concerning actions taken for the MDARS Program. However, we identified problems with program management for MDARS-Interior that the Army Program Office has not resolved. Specifically, we identified outstanding problems with program management for the EMD contract award and administration and for program performance, costs, and assessments. The MDARS-Interior Program ended before the production and deployment phase and did not progress beyond the EMD phase. The Army Program Office recommended the program for suspension in July 2003 but had not taken decisive action on the suspension. The Finding section discusses the problems in more detail.

Issue 6. When the EMD phase came up for bid, Cybermotion teamed with Lockheed Martin on the proposal.

Audit Response. We confirmed that Cybermotion teamed with Lockheed Martin to submit a bid for the EMD phase.

Issue 7. The contract was to include final engineering to meet certain government requirements and 5 years of production with terms of indefinite quantities and deliveries.

Audit Response. We confirmed that the EMD contract stated that the contract was to include final engineering to meet certain government requirements and was for 5 years of production with terms of indefinite quantities and deliveries. However, production quantities were not produced as the program did not advance beyond the EMD phase.

Issue 8. The request for proposal was effectively based on the use of Cybermotion platforms since they were the only design with extensive testing history.

Audit Response. We confirmed that the request for proposal was based on the Cybermotion platform because SSC-SD and Cybermotion worked together to enhance functionality of the platform with the Cooperative Research and Development Agreement and the Broad Agency Announcement. However, to make competition open and fair to all bidders, SSC-SD removed the requirements that applied to Cybermotion. The removal allowed other bidders to participate with the proposal and prevented Cybermotion from being a sole-source provider for the platform.

Issue 9. It now appears that General Dynamics listed Cybermotion as a subcontractor in their bid, despite the fact that Cybermotion had declined to work with them.

Audit Response. The General Dynamics proposal did include Cybermotion as a supplier of commercial products.

Issue 10. General Dynamics bid on and won a contract to build a system whose major component they had no right to reproduce.

Audit Response. The General Dynamics bid listed Cybermotion as a supplier and disclosed its intention to purchase the platforms from Cybermotion in its bid. By accepting the General Dynamics bid, the Army Program Office recognized that the platforms would be purchased from Cybermotion.

Issue 11. Under the Cybermotion proposal, Lockheed Martin would have been the primary contractor. Cybermotion had given Lockheed Martin a data rights covenant that allowed Lockheed Martin to produce the platforms if Cybermotion could not produce them. General Dynamics had no such covenant with Cybermotion.

Audit Response. Contracting office's correspondence to Lockheed Martin indicated that Lockheed Martin did not address the evaluation factors identified in the request for proposal. In addition, the contracting office determined that a major revision was necessary to correct numerous items in the proposal. Therefore, the data rights covenant would not have helped Lockheed Martin to win the bid.

Issue 12. General Dynamics had no such covenant and should have been disqualified from the bidding if it did not provide an alternate means of supplying the platforms with a viable contingency.

Audit Response. General Dynamics won the bid based on addressing the parameters in the request for proposal. The General Dynamics bid addressed ways to minimize the potential loss if Cybermotion could not perform. However, the Army Program Office and General Dynamics did not agree to a contingency plan that might have allowed MDARS-Interior to continue if Cybermotion could not supply the platforms. The Finding section discusses the contract award and administration for the EMD contract.

Issue 13. Cybermotion requested copies of the General Dynamics bid because Cybermotion understood that the General Dynamics cost per robot was almost double the cost per robot of their proposal with Lockheed Martin.

Audit Response. The source selection decision was based on best value. Therefore, the combined technical factors were more significant than cost. In addition, the contracting office had already determined that the Lockheed proposal was out of the competitive range.

Issue 14. Cybermotion was originally told it lost based on “technical merit.”

Audit Response. Based on contracting office correspondence, the Lockheed Martin bid was out of the competitive range because it had more than 50 items for correction in the technical and management proposal, 11 items for correction in communications, and more than 40 items for correction in the cost proposal.

Issue 15. The date for completion of the EMD phase had come and gone before General Dynamics even began work. Additional extensions and overruns occurred for several years.

Audit Response. The Army granted approval for the MDARS-Interior Program to enter the EMD phase on April 17, 1998. The Army Program Office issued the request for proposal on September 1, 1998, and awarded the EMD contract to General Dynamics on April 30, 1999, for \$1.7 million. The contracting office could not provide documentation that showed the initial period of performance for the EMD phase. However, the Army Program Office issued a contract amendment on July 31, 2000, to increase the contract amount by about \$0.9 million. General Dynamics required the increase to reduce the platform speed and quantity of the radio frequency identification tags. On April 18, 2001, the Army Program Office issued another amendment to increase the number of platforms, increase the contract amount by about another \$0.9 million, and extend the EMD phase to October 31, 2001. General Dynamics required the increase and extension to work on the additional platforms and to conduct retesting for the production qualification tests. The Army Program Office issued still another contract amendment on February 25, 2002, to increase the contract amount by \$0.5 million and extend the EMD phase to August 16, 2002. General Dynamics required the increase and extension to correct deficiencies identified during testing and to test the corrections. The Army Program Office issued a final amendment on December 16, 2002, to extend the EMD phase to February 28, 2003, but did not provide a reason for the extension. Based on the contract amendments, the contract amount increased by \$2.3 million and the EMD contract lasted from April 30, 1999, to February 28, 2003, which was nearly 4 years. Based on the initial award of about \$1.7 million and the amendments for \$2.3 million, the total contract amount was about \$4 million. Appendix D shows the contract amendments, the cost of each amendment, and the change the amendment made to the period of performance. The Finding section discusses contractor performance and oversight for the EMD contract in more detail.

Issue 16. Cybermotion received a desperate request from the Army Program Office to bail out the General Dynamics engineers just days before the acceptance testing was to begin.

Audit Response. The Army Program Office stated that it did not request assistance from Cybermotion. However, SSC-SD stated that both the Army Program Office and the SSC-SD repeatedly requested Cybermotion to join forces with the rest of the team to help solve emergent technical issues that are a fact of life in the robotics business.

Issue 17. Cybermotion attempted to use the base station software (Multiple Resource Host Architecture) developed by SSC-SD at the cost of about \$15 million and found it in worse condition than it had been in 1995. The

software was very crude, had no usable diagnostics, was poorly integrated, frequently crashed, and was incapable of supporting anything but the most rudimentary operations.

Audit Response. Cybermotion did not identify when it tried to use the software. Based on test reports and contract amendments, we estimated that it was sometime during 2001. We reviewed the test reports that the Army Program Office provided for that timeframe (see Appendix E). None of the test reports identified significant issues with the software.

Issue 18. Cybermotion loaded its base station software and used it to correct the problems. Even though Cybermotion bundled its software with the robots that the Army Program Office was buying, the Army Program Office and SSC-SD refused to even test the Cybermotion software. As a result of this experience, a Cybermotion official stated that he wrote a white paper to the program office detailing the many defects with the software. The report was ignored.

Audit Response. Cybermotion software was included with the platforms that it supplied, and SSC-SD agreed that the Cybermotion software worked well with the systems that Cybermotion designed. However, the MDARS Program systems were developed by various contractors; therefore, SSC-SD mandated the use of the Multiple Resource Host Architecture as the command and control software for systems developed for the MDARS Program. Also, the request for proposal for the EMD contract required the use of the software. The requirement allowed SSC-SD to comply with the OSD requirement for software that is interoperable and works in a Joint environment. The Army Program Office and SSC-SD officials stated that they did not respond to the white paper because Cybermotion did not have a contract with the government when they received it and they had no authority to respond to it.

Issue 19. Cybermotion was told the first production purchase would be in October 2001, which slid to January 2002. As January 2002 approached, Cybermotion was told production would start in June 2002. By late January 2002, Cybermotion was told not to count on the June 2002 estimate.

Audit Response. Production delays can occur for justifiable reasons. However, the reasons for the delays should be documented. The Army Program Office and SSC-SD provided test reports which documented that the delays were for routine testing and retesting after corrections. Except for the General Dynamics reports that identified the platform as the reason for the testing failures, the reports did not state whether contractor performance contributed to the reasons for the additional testing. In addition, three contract amendments were issued that extended the period of performance at a cost of about \$1.4 million. Another amendment increased the cost by an additional \$0.9 million. As a result of the amendments, the period of performance for the EMD contract was about 4 years and the cost was about \$4 million. See the Finding section for a discussion on contractor performance and oversight.

Issue 20. Cybermotion could not sustain a skeleton production program for the time it took to reach the production and deployment phase. A Cybermotion official informed the program office and General Dynamics that the robots would no longer be available and began mothballing (closing down) the company.

Audit Response. The Government is not normally involved in business decisions of private companies and is not privy to decisions made by those companies.

Issue 21. General Dynamics tried several approaches to try to deal with Cybermotion discontinuing operations. The first was to offer Cybermotion \$10,000 for its data rights. The second was to ask the Army Program Office for more money to redesign the platform. The request was denied and General Dynamics went back to Cybermotion proposing that the government buy its data rights for \$1 million. A Cybermotion official called the Army Program Office to confirm that the government was prepared to make the purchase and was told that they were not. The official then asked the General Dynamics vice president if General Dynamics was prepared to finance the purchase and was told they were not.

Audit Response. According to the Army Program Office and SSC-SD, they were not involved in the discussions with Cybermotion and General Dynamics on data rights.

Issue 22. The entire investment of almost \$100 million was to disappear and the MDARS-Exterior Program (also awarded to General Dynamics) would proceed with the Army Program Office being given another development program to manage.

Audit Response. The Army Program Office did not provide documentation showing the total amount spent for the MDARS Program. Also, the Army Program Office did not assess the MDARS-Interior Program to take advantage of lessons learned and possibly enhance management of the MDARS-Exterior portion of the program. See the Finding section for a discussion on contractor performance and oversight and program costs.

Issue 23. All of the MDARS Programs have been awarded to General Dynamics, and General Dynamics has apparently suffered no ill effects from its botching of the MDARS-Interior Program.

Audit Response. SSC-SD provided documentation to show that the Army Program Office has awarded contracts for various robotics programs to companies other than General Dynamics. The documentation showed that companies, such as Northrop Grumman Remotec, Boeing, and National Robotics Engineering Consortium have received contract awards.

Issue 24. A Cybermotion official stated that he had been told many years earlier by the program's technical officer not to count on the program being real.

Audit Response. We are not privy to third party conversations and could not confirm the comments. However, both the Army Program Office and SSC-SD appeared to be committed to the success of the MDARS Program.

Issue 25. It is the opinion of a Cybermotion official that SSC-SD intentionally extended the program research and development phase to keep development money rolling in for the software (about \$1.5 to \$3 million per year). This was done repeatedly by adding frivolous requirements.

Audit Response. SSC-SD provided documentation to show that it supported numerous DoD robotics programs and provided technical management for MDARS-Interior concurrent with the software development effort. The robotic programs included ROBART III, MDARS-Exterior, Man Portable Robotic System, and Tactical Mobile Robot technology transfer. The technical management responsibilities for MDARS-Interior included research, development, test and evaluation, system engineering, and integration support.

Issue 26. Almost all Army Program Office contracts of any size have gone to General Dynamics. The Cybermotion official stated that the situation is so bad that he has been told by companies that they will not even bid Army contracts because they do not believe they can win.

Audit Response. SSC-SD provided documentation to show that contractors other than General Dynamics received awards for various aspects of the robotics program. In addition to the companies listed at Issue 23 above, other companies, including Radian, iRobot, and Lockheed Martin, received contract awards.

Issue 27. A Cybermotion official indicated his surprise to find that the Army Program Office is requesting over \$3 million a year for the MDARS Program in the budget request through 2007.

Audit Response. Cybermotion based the \$3 million estimate on a February 2002 budget document. However, the Army Program Office had not provided documentation for the total amount spent for the MDARS Program. MDARS-Interior was recommended for suspension in July 2003 but the suspension was not completed. The MDARS-Exterior Program is still being developed. See the Finding section for a discussion on program costs.

Appendix D. Contract Amendments

<u>Amendment and Date</u>	<u>Reason for Amendment</u>	<u>Cost of Amendment</u>	<u>Change to Period of Performance</u>
P00001 11/05/1999	Replaced discontinued Cybermotion platform with new version and reduced platforms from five to four.	0	None
P00002 07/31/2000	Reduced platform speed and quantity of radio frequency identification tags.	\$887,902	None
P00003 11/09/2000	Made text changes to the statement of work and appendices.	0	None
P00004 03/02/2001	Implemented provisions for manpower reporting requirements in accordance with the Army Federal Acquisition Regulation Supplement.	0	None
P00005 04/18/2001	Increased platforms from four to seven and extended period of performance for the additional platforms and for testing.	\$843,768	Extended to 10/31/2001*
P00006 08/07/2001	Removed manpower reporting requirements of amendment P00004.	0	None
P00007 08/09/2001	Revised the DD Form 254 Contract Security Classification Specification.	0	None
P00008 02/25/2002	Extended period of performance for testing.	\$533,623	10/31/2001 to 08/16/2002
P00009 12/16/2002	Extended period of performance; no reason was given for the extension.	0	08/17/2002 to 02/28/2003*
Total		\$2,265,293	

*The Army Program Office did not document the initial period of performance for the EMD contract in the contract file, but based on the contract award date of April 30, 1999, and the last amendment that extended the period of performance to February 28, 2003, we believe that the EMD contract lasted nearly 4 years. The contract was awarded on April 30, 1999, for \$1.7 million. Based on the contract amendments of \$2.3 million, the total contract amount was about \$4 million.

Appendix E. Test Results

<u>Test</u>	<u>Year</u>	<u>Purpose</u>	<u>Test Results</u>	<u>Tester</u>
Camp Elliot Product Assessment Tests*	1995	Examine product assessment capabilities	Needed tag reader improvements	Navy
Technical Feasibility Test*	1997	Test technical capabilities of platform and software in support of milestone review	Met key testing criteria; did not meet two safety/health factors and one human factor	Army Aberdeen Test Center
Early User Appraisal*	1998	Test prototype and obtain user feedback	Identified minor navigation problems	Navy
Production Qualification Test 1a	2000	Test MDARS-Interior platform and software	None	General Dynamics Robotics Systems
Production Qualification Test 1b	2001	Test MDARS-Interior platform and software	None	General Dynamics Robotics Systems
Production Qualification Test 2	2001	Test MDARS-Interior platform and software	3 of 11 requirements not met for normal operation and 1 of 2 not met for power source, and problems with docking	General Dynamics Robotics Systems
Limited User Test	2001	Test platform for data to support low rate initial production decision	Requirements not met for docking and charging, and obstacle detection	U.S. Army Operational Test Command
Post Limited User Test	2002	Retest docking and charging for two MDARS-Interior platforms	Requirements partially met	General Dynamics Robotics Systems
Reengineering Production Qualification Test	2002	Test limitations of docking reliability and obstacle avoidance performance	None	General Dynamics Robotics Systems

*Conducted before the EMD contract.

Appendix F. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition, Technology, and Logistics
 Director, Defense Systems
 Director, Systems Acquisition
 Deputy Director, Land Warfare and Munitions
Under Secretary of Defense (Comptroller)/Chief Financial Officer
 Deputy Chief Financial Officer
 Deputy Comptroller (Program/Budget)

Department of the Army

Assistant Secretary of the Army, Acquisition, Logistics, and Technology
Army Acquisition Executive
 Joint Program Executive Office for Chemical and Biological Defense
 Product Manager, Force Protection Systems
Auditor General, Department of the Army

Department of the Navy

Naval Inspector General
Auditor General, Department of the Navy
Space and Naval Warfare Systems Center

Non-Defense Federal Organization

Office of Management and Budget

Commercial Organizations

Cybermotion, Inc.

Congressional Committees and Subcommittees, Chairman and Ranking Minority Member

Senate Committee on Appropriations

Senate Subcommittee on Defense, Committee on Appropriations

Senate Committee on Armed Services

Senate Committee on Governmental Affairs

House Committee on Appropriations

House Subcommittee on Defense, Committee on Appropriations

House Committee on Armed Services

House Committee on Government Reform

House Subcommittee on Government Efficiency and Financial Management, Committee on Government Reform

House Subcommittee on National Security, Emerging Threats, and International Relations, Committee on Government Reform

House Subcommittee on Technology, Information Policy, Intergovernmental Relations, and the Census, Committee on Government Reform

The Honorable Bob Goodlatte, House of Representatives

Department of the Army Comments



REF ID: A66666
ATTENTION OF

DEPARTMENT OF THE ARMY
JOINT PROGRAM EXECUTIVE OFFICE
FOR CHEMICAL AND BIOLOGICAL DEFENSE
5203 LEESBURG PIKE
SKYLINE #2, SUITE 1009
FALLS CHURCH, VA 22041-3203



SFAE-CBD

APR 4 2006

MEMORANDUM FOR DEPARTMENT OF DEFENSE INSPECTOR GENERAL

SUBJECT: Report on the Allegation Concerning the Mobile Detection Assessment Response System Program (Project No. D2005-D000AB-0191)

Per your request, I have reviewed the draft report on the alleged waste in the Mobile Detection Assessment Response System (MDARS) program and have the following comments:

1. DoD IG Audit Conclusion: (page 6): *"We partially substantiated the allegation of waste but there was no evidence to suggest that the Army Program Office deliberately caused the program to fail. We identified outstanding problems with program management that the Army Program Office needs to resolve for the EMD contract award and administration, and subsequent program performance. In addition, the Army Program Office has not applied lessons learned from the MDARS-Interior Program for the MDARS-Exterior Program. Until the Army Program Office adequately resolves those program management issues, the success of the MDARS-Exterior Program remains questionable."*

JPEO-CBD Response: Non-concur with the audit conclusion. The report fails to clearly define what allegations were substantiated and why. The report fails to substantiate any instance of actual waste, the definition being useless or profitless activity. To substantiate waste, the report must identify specific instances where the program office committed funds knowing that the activity would fail or would serve no useful purpose. While the report does articulate some shortfalls in program management at the time (2003), it fails to appropriately tie these to allegations of waste. It identifies cost growth within the program but does not delineate if the growth was a result of useless activities or just normal program maturation and definition. The report fails to address how this lack of oversight contributed to financial waste. The lack of oversight may have contributed to less than optimal performance, but certainly not waste.

2. DoD IG Recommendation: (page 7): *"We recommend that Product Manager, Force Protection Systems, provide a formal assessment for the Mobile Detection Assessment Response System Interior and Exterior programs to the Army Acquisition Executive and the Deputy Director, Land Warfare and Munitions, that includes:*
1. Planned and actual program milestones for the Interior and Exterior programs and reasons for variances.
2. Planned and actual program costs for the Interior and Exterior programs and reasons for the variances.

3. *Actions taken by the Army Program Office for contractor performance that did not meet established performance parameters.*
4. *Documentation showing the Army Program Office oversight of testing that supports the decision to allow General Dynamics Robotics Systems to continue all testing of the Mobile Detection Assessment Response System-Interior Program.*
5. *A formal termination of the Mobile Detection Assessment Response System-Interior Program or a strategy to revive the program.*
6. *An action plan for successful execution of the Mobile Detection Assessment Response System-Exterior Program.*

JPEO-CBD Response: Non-Concur with the Recommendation (page 7) – It is not appropriate that this program be briefed to the Army Acquisition Executive as recommended in the report. It is appropriate that a program review be provided to the Joint Program Executive Officer for Chemical and Biological Defense. The JPEO-CBD is the Milestone Decision Authority (MDA), for the MDARS program. The Joint Project Manager, Guardian has scheduled the MDARS program review with the MDA for April 4, 2006. A formal termination of the MDARS - Interior program will be sought at that time. It should be noted that the Combat Developer has removed the requirement for an MDARS - Interior variant in the updated MDARS CPD, which is currently awaiting approval at the U.S. Army Training and Doctrine Command (TRADOC). The review will also encompass a review of the MDARS – Exterior program status. The MDARS - Exterior program remains on schedule and within established costs. The program is on schedule for its Milestone C, Full Rate Production, In Process Review, 1QFY07.

3. DoD IG Findings: (pages 4-6)
JPEO-CBD General Comments

- A. The assumption that the MDARS-Exterior (MDARS-E) program is at risk to follow the same failures is unwarranted since the Product Manager has leveraged lessons learned from the MDARS - Interior Program and incorporated them as appropriate into the MDARS - Exterior program. These include additional field testing; use of a revised Earned Value Management System to better track cost and performance; implementation of a revised Risk Detection/Assessment Program; and use of Independent Government Test and Evaluation Agencies during PQT-2. The PM-FPS has also implemented a unique Government tiger team of experienced robotics, software, logistics, acquisition and contracting specialists to augment the standing Integrated Product Team (IPT) working groups to address issues or concerns and arrive at solutions to meet performance, schedule and cost goals.
- B. All concerns related to the participation and financial stability of the platform supplier were satisfactorily resolved by the contracting agency, the Source Selection Evaluation Board (SSEB) and the Source Selection Authority (SSA) at the time of contract award. The supplier was providing a commercially available technology already in use by private industry.
- C. Assumptions of waste were made based on schedule adjustments resulting from unsupervised MDARS – I test failures. The assertion that the Contractor was

allowed to conduct unsupervised testing is incorrect. The report in Appendix E, erroneously identified the contractor as the tester for the Limited User Test (LUT). General Dynamics Robotics Systems (GDRS), had no involvement in the preparation, conduct or reporting of the test other than to provide logistics support. The LUT was prepared, coordinated and executed by the U.S. Army Operational Test Command. All other testing was reviewed and approved by the Government prior to execution. This included review and approval of all test plans, procedures and reports. Additionally, the Government, through the T&E IPT, had representatives monitoring and providing oversight at all test activities. This included the PM as well the U.S. Army Test and Evaluation Command (ATEC). This oversight extended into concurrent Program Status Reviews held on a bi-monthly basis and IPT working groups. The report also failed to differentiate between test failures resulting from the platform and the sensor packages mounted on the platform.

- D. The Program costs cited in the report need to be revised. The Army did not request an additional \$6.1M in FY 2000 to support the MDARS – I program. The Army requested only \$2M in additional RDT&E funding from the Physical Security Equipment Action Group (PSEAG). Computer Science Corporation, as referenced in the report, provides Scientific, Engineering and Technical Assistance (SETA) support across the PM and its products. CSC provided only \$1.6M in SETA support to the MDARS – I program.

Point of contact for this action is Mr. Archie Attarian, Camber Corporation, telephone number (703) 931-9180 x 223 or email archie.attarian@ipeocbd.osd.mil.



STEPHEN V. REEVES
Brigadier General, USA
Joint Program Executive Officer
for Chemical and Biological Defense

Team Members

The Acquisition and Contract Management Directorate, Office of the Deputy Inspector General for Auditing of the Department of Defense prepared this report. Personnel of the Office of Inspector General of the Department of Defense who contributed to the report are listed below.

Richard B. Jolliffe
Bruce A. Burton
Dianna J. Pearson
John Huddleston
Celeste Mckay
Kiana Silver
Charles Dekle
Tam (Jenny) Phan
Jacqueline Pugh